

Overview Of Technology Transfer In Germany

By Christian Czychowski

The transfer of knowledge and technology from higher education institutions and higher education-related institutions to industry and vice versa in Germany is based on a highly differentiated system of different stakeholders. In addition to the universities themselves, there are three large clusters of non-university research institutions: Helmholtz Association, the Max Planck Society and the Leibniz Association with their respective institutes.

I. Historical Development and Overview

All participants have created technology transfer structures. Recently, the historical and legislative background to this has been above all an amendment to the Employee Invention Act (Gesetz über Arbeitnehmererfindungen). In 2002 the so-called university teacher privilege (Hochschullehrerprivileg) was abolished and a new § 42 ArbEG¹ was passed.

As a result of this change in the law and, in particular, through funds made available by the Federal Government, so-called patent exploitation agencies were created in almost all universities, which have joined forces in the TechnologieAllianz.²

In the meantime, there have been some changes in this system. In simple terms, one agency is responsible for several universities in the respective federal states and exploits their inventions. There are many different forms of cooperation: from exclusive cooperation with application and exploitation of patents, including the conclusion of cooperation and R&D agreements, to the mere administration of intellectual property rights.

In addition to the participants in the TechnologieAllianz and their patent exploitation agencies, the three large non-university research institutions have their own transfer institutions.³

Long before the change in the law, the Fraunhofer Gesellschaft, which is particularly dedicated to practice-oriented

research, was established.⁴ This society with its 72 institutes has a central exploitation department in Munich, which administers and manages patent applications and exploitations as well as contracts.

Soon after the new Employee Invention Act was passed, substantial guidance on how to deal with the new amendment, *e.g.* in terms of contracts, was provided. The main reason was the abolishment of the university teacher privilege and the assignment of intellectual property rights to the university and no longer to the individual university teacher. These changes led to restrictions for the teachers in the freedom of deciding whether the inventions should or shouldn't be published. With the new introduced negative right of publication (negatives Publikationsrecht), the teachers are only able to prevent an invention from being published on the basis of their academic freedom (Wissenschaftsfreiheit), which is an individual fundamental right protected at constitutional level in Germany.

■ Christian Czychowski,
Boehmert & Boehmert
Attorney,
Berlin, Germany
E-mail: Czychowski@
boehmert.de

II. Model Agreements

Following various model contract proposals, the model agreements for R&D cooperation at the Federal Ministry of Economics and Technology prevailed in the 2010s.⁵ These model agreements, which are now in their third edition, attempt to reconcile the interests of all parties involved, universities and research institutions as well as SMEs and large industry, which were all involved in the negotiations on these models at the Federal Ministry of Economics and Technology.⁶ At this point, only the essential contents of these model agreements are reproduced in order to give a feeling of which topics in Germany play a role again and again in the transfer of technology under contract law:

- Identification of the subject matter of the contract as precisely as possible (the distinction between a mere R&D contract and real cooperation)
- Assignment of old and new rights
- Dealing with the negative freedom of publication of the university teachers
- Dealing with remuneration
- Linked to this: questions of EU state aid law.

The most important rule of this model agreement on new rights is described here. The model agreement distinguishes three different types of models, on the one hand real cooperation, and on the other hand, research contracts, once in the

1. § 42 ArbEG new version (In view of the transitional rule in § 43 ArbEG, this provision applies to all inventions made after 07.02.2002):

The following special provisions apply to inventions made by university employees:

1. The inventor is entitled to disclose the service invention within the scope of his teaching and research activities if he has notified the employer of this in good time, as a rule two months in advance. § Section 24 (2) shall not apply in this respect.
2. If an inventor refuses the disclosure of his service invention on the basis of his freedom of teaching and research, he is not obliged to report the invention to the employer. If the inventor wishes to disclose his invention at a later date, he shall immediately notify the employer of the invention.
3. In the event that the service invention is claimed, the inventor shall have a non-exclusive right to use the service invention within the scope of his teaching and research activities.
4. If the employer exploits the invention, the remuneration shall amount to 30 per cent of the income generated by the exploitation.
5. § 40 No. 1 shall not apply.

2. www.technologieallianz.de.

3. Technology transfer in the Helmholtz Association, Max Planck Innovation for the Max Planck Institutes and Leibniz Transfer for the Leibniz Institutes.

4. www.fhg.de

5. www.bmwi.de/Redaktion/DE/Publikationen/Technologie/mustervereinbarungen-fuer-forschungs-und-entwicklungskooperationen.hmt.l

6. See for detailed information Rosenberger/ Wündisch, 3 Aufl. 2018, marginal 6. m. w. N.

variant with complete transfer of the industrial property rights, once with mere licensing:

At the heart of every research, the contract is the question of who should be entitled to the results of the research. In the interests of a balanced allocation of rights, the expert group has firstly distinguished between contract types and secondly within the respective contracts between questions of the substantive allocation of rights (No. 6) and regulations on the preparation of applications and formal follow-up questions (No. 8 *et seq.*).

This distinction was also made in order to take account of the special interest of the higher education institution/research institution invisibility with regard to its applications for industrial property rights (keyword: priority-based application by higher education institution, see No. 8).

1. Research Cooperation

Within the framework of the research cooperation, the expert group considers it appropriate to take a more differentiated look at the research results in order to find a solution that is in line with the interests involved. Three types of research results are possible. In addition, the expert group proposes two variants for regulating joint inventions.

If the results are obtained exclusively by the industrial partner, the rights are fully vested in this partner (industrial partner results). On the other hand, the results exclusively or more than 50 percent generated by the university/research institution remain with the latter (university results). However, it must grant the industrial partner an exclusive license. The proposal makes it possible to do justice to the interests of both sides. On the one hand, the commercial exploitation for the industrial partner should be secured, on the other hand, the ownership of the rights of the university/research institution should be secured, as far as the results have been developed solely by it.

Community results are results involving both the higher education/research institution and the industrial partners. As mentioned above, two regulatory models are presented here. The first model is based on a certain proportion of the contractual partners and contractually regulates their allocation. The second model leaves the respective shares independent of their size to the respective contractual partner and is based on the legal fractional share community.

In the case of joint results, *i.e.* those in which the proportion of employees at the higher education institution/research institution is less than 50 per cent, conflicts can easily arise. In order to prevent this, the expert group decided to recommend assigning joint results to only one side, namely the industry partner, thus avoiding double ownership of rights. Because in such a case it would come for lack of other regulation after the jurisdiction to an application of the §§ 705 ff. BGB. A settlement, according to these rules entails, numerous formal difficulties, *e.g.* regulations on the coordination of application texts, on the justification of licensing, obligations in the defense of industrial property rights.

A precise allocation of the new rights presupposes that the parties agree on a share in the inventions during the performance and execution of the contract. This (usually) cannot be determined in advance.

EU state aid law requires that the basic access to and allocation of intellectual property rights be contractually regulated before the start of the project. However, since it is difficult to determine the concrete financial conditions in advance, for example with regard to the market price or the value of the contributions to the project, this is not required under the Union framework.

With regard in particular to the question of the appropriate market price, reference is made to the introductory remarks on the EU State aid aspects of R&D cooperation. At this point, the possibility of deducting contributions of the industrial partner to the costs of the activities of the university/research institution from the price for the resulting rights within the framework of the research cooperation should once again be emphasized.

In the third edition, the working group decided to leave the legal community of fractional shares for the joint invention, *i.e.* the contractual partners remain owners of their shares regardless of the size of the shares. The legal community of fractional shares will subsequently continue to exist until the contracting parties either contractually regulate the use and administration of the results, *e.g.* in a co-inventor contract, or until one contracting party takes over the share of the other contracting party. It should be noted, however, that if this option is chosen, the regulations mentioned above (*e.g.* on the coordination of application texts, on the justification of licensing, obligations in the defense of industrial property rights) must be regulated in detail.

2. Contract Research Variant: Transfer

It is characteristic of contract research that the university/research institution does not provide any (quasi) financial resources for the implementation of the project. The expert group therefore considers it consistent to allocate the results of the research project materially exclusively to the industrial partner.

This and subsequent transfer rules are the subjects of Clause six of the Contracts. The declaration of accession in Annex three must be observed at this point. In many cases, the contractual partners do not consider that in many cases third parties such as diploma students, doctoral students and students participate in the projects who are not obliged to the university/research institution on the basis of an employment contract. Special reference is hereby made to the necessity of their inclusion. Corresponding regulations can be found in Section 6.6.

Section 6.7 describes that the university/research institution does not lose the right to use the research results for its own teaching and research activities.

However, situations may arise in which the results of the project carried out are used for their part in further third-party funded research. The contract modules take this special case into account by giving the industrial partner a say in the process. In order to do justice to the interests of both parties, the consent of the industrial partner must not be unreasonably withheld according to the principles of good faith.

Because of the comprehensive transfer in this type of contract, the case was regulated separately that inventions are made that do not concern the contractually agreed areas of application. For these, the industrial partner of the university/research institution grants an irrevocable, free of charge, depending on the negotiation exclusive, simple or sole license by way of a so-called relicense (Item 6.8, Alternative 1). In addition, the second subparagraph of Section 6.8, Alternative 1, contains the possibility of taking over industrial property rights for those countries in which the industrial partner wishes to relinquish individual new rights in whole or in part.

Finally, Point 6.8, Alternative 2 contains a special provision for inventions in fields other than the subject matter of the contract.

3. Contract Research Variant: License

Unlike the transfer alternative, the results of the research project are attributed to the industrial partner in this type of

contract by means of an exclusive license for the fields of application and the contract territory, which is limited in time only by the duration of the intellectual property right.

With this variant, there is no need for a regulation on the involvement of third parties with-in the meaning of § 42 ArbEG, but only an obligation on the part of the higher education institution/research institution to allow third parties who are not currently employed by it to participate only after the transfer of the rights (Section 6.3).

Section 6.4 describes that the university/research institution does not lose the right to use the research results for its own teaching and research activities. In the event that the results of the project carried out are used for their part in further third-party research, the above remarks within the framework of the alternative transfer shall apply accordingly.

Section 6.5, in turn, contains a special provision for inventions in fields not relating to the subject matter of the contract (*i.e.* which, in particular, lie outside the research plan). For such inventions, the university/research institution grants the industrial partner a non-exclusive license on reasonable terms, even beyond the scope of the actual contract, if the industrial partner

is interested in exploiting the inventions. Here, too, a separate contract must be concluded (comparable to the provision on prior rights in the research co-operations, Section 5.3.2).

With regard to the option for the industrial partner (Point 6.5), the contractual partners may consider sharing the industrial partner in an appropriate way in any licensing revenues of the university/research institution, whereby the “appropriateness” should refer to both the invention and the financing share of the industrial partner.

III. Outlook

The working group at the Federal Ministry of Economics is currently discussing whether it should extend the model agreements in the direction of the questions of multinational consortia, which are also discussed in detail in this issue, especially in connection with EU research funding programmes or national research funding programmes.

In addition, there is currently a discussion in Germany as to whether a separate legal personality should be created for research co-operations. The working group may also comment on this in a further edition of the model agreements. ■

Available at Social Science Research Network (SSRN):
<https://ssrn.com/abstract=3380545>